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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,404	07/30/2001	Lawrence A. Booth JR.	INTL-0618-US (P11949)	4653

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EXAMINER	
MACCHIAROLO, PETER J	

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,404	BOOTH ET AL.	
	Examiner	Art Unit	
	Peter J. Macchiarolo	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,11,12,14-19,23-25 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,11,12,14-19,23-25 and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The reply filed on 06/20/2005 consists of changes to the claims, drawings, and specification, and further, the reply consists of request for reconsideration of the finality in the previous Office Action. Applicant's request for reconsideration is persuasive. Therefore, the finality is withdrawn and the above have been entered. However, pending claims 1, 3-5, 11, 12, 14-19, 22-25, and 27-29 are not allowable as explained below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-5, 11, 12, 14-19, 23-25, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asai et al (USPN 6448710; "Asai") in view of previously cited Sakaguchi et al (USPN 5990615; "Sakaguchi").

3. Regarding claims 1 and 11, Asai shows in figure 12, an organic light emitting display comprising a plurality of modules each including a front plate (11) and a back plate (22); an organic light emitting material (19) formed on one side of the front plate, the organic light emitting material to pass light outwardly through the front plate; said back plate secured over the one side of the front plate. Asai further discloses a protective film (21) seals the region between the front and back plates and between adjacent modules to prevent formation of non-luminescent

regions (dark regions) due to permeation of water or the like from edges of the electrodes and defects.

4. Asai is silent to a filler material including a desiccant mixed into the filler material filled between the front and back plates and surrounding each module.

5. However, Sakaguchi teaches using a filler material including a desiccant mixed into the filler material better prevents the occurrence and growth of dark spots in the organic element.

6. Furthermore, one skilled in the art will recognize that manufacturing such a device will comprise the steps of covering, combining, and filling. Hence, the structure taught by Asai and Sakaguchi meets Applicant's recited method step limitations.

7. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replacing Asai's protective film with the filler material of Sakaguchi by covering, combining, and filling, to better prevent the occurrence and growth of dark spots in the organic element.

8. The Examiner notes that the limitation in claim 1, "to seal the region between the front and back plates and the region between adjacent modules" is an intended use type limitation. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The above limitation has been considered, but not patentable over Asai in view of Sakaguchi, since Sakaguchi's filler material will seal Asai's regions between the front and back plate and between adjacent modules.

9. Regarding claims 3, 4, 5, 12, 14, and 15, Asai is silent to using a dehydrating agent.

10. However, Sakaguchi further teaches a dehydrating agent such as granular silica gel or zeolite may be used to absorb oxygen or moisture[1].

11. Although Sakaguchi is silent to the filler material including an epoxy, it would have been obvious to one having ordinary skill in the art that the time the invention was made to include an epoxy in the recited filler material (i.e. perfluoroalkane or perfluoroamine), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Further, one would be motivated to use epoxy in the filler material for a variety of reasons, including material availability, overall sealing requirements, and manufacturing processes with sensitive requirements.

12. Further, it would have been an obvious matter of design choice to include an epoxy in the filler material, since Applicant has not adequately disclosed any testing or analytical data which establishes criticality for this modification, or recites any specific advantage the invention benefits from over the prior art from this modification. It appears that Sakaguchi's organic light emitting element would perform equally well when epoxy is used in the filler material.

13. Therefore, according to the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Asai and Sakaguchi including epoxy in the filler material.

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[1] Sakaguchi, col. 3, ll. 16-31.

14. Regarding claim 16, Asai shows the back plate is surface mounted to the front plate.

15. Although Asai and Sakaguchi are silent to the method of surface mounting the back plate to the front plate, this method is obvious in light of the resultant structure.

16. The reasons for combining and motivation are the same as for claim 11.

17. Regarding claim 17, Asai shows the front plate is transparent and passes light emitted from said organic light emitting material outwardly through said front plate.

18. Although Asai and Sakaguchi are silent to the method forming the transparent front plate, this method is obvious in light of the resultant structure.

19. The reasons for combining and motivation are the same as for claim 11.

20. Regarding claims 18 and 24, Asai is silent to securing said array of modules to a carrier with a filler material including a desiccant mixed into the filler material.

21. However, Sakaguchi shows in figure 3, the module is secured to a carrier (1), and this prevents the occurrence and growth of dark spots in the organic element.

22. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to secure the module array of Asai to a carrier to prevent the growth of dark spots.

23. Regarding claims 19 and 25, Asai is silent to forming a lip of the filler material beyond the periphery of the array of modules.

24. However, Sakaguchi shows in figure 1 a lip (14) of filler material, which includes desiccant, is formed that extends beyond the periphery of the module and the carrier.

25. The reasons and motivation for combining are the same as for claim 18 above.

26. Regarding claim 23, Asai shows in figure 14, the plurality of modules forms an array.

27. Regarding claim 27, Asai shows in figures 1 and 5, a plurality of modules, each module including a front plate (11) and back plate (22) parallel to the front plate; an organic light emitting material (19) formed on one side of the front plate.

28. Asai is silent to a filler material.

29. However, Sakaguchi teaches a filler material (12) including a desiccant (11) mixed into the filler material, and this configuration better prevents the occurrence and growth of dark spots in the organic element.

30. The reasons to combine and motivations are the same as for rejected claim 1.

31. The Examiner notes that the limitation in claim 27, "to secure the back plate over the one side of the front plate, and to seal the region between the front and back plates and the region between adjacent modules" is an intended use type limitation as discussed in numbered paragraph 8.

32. Regarding claim 28, the limitations herein have been discussed at rejected claim 24.

33. Regarding claim 29, the limitations herein have been discussed at rejected claim 25.

34. Regarding claim 30, Asai shows in figure 12 the modules on the periphery of the display extend to the end of the display.

35. **Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asai in view of Sakaguchi in further view of Nilsson et al (USPN 6635989; "Nilsson").**

36. Regarding claim 22, Asai and Sakaguchi are silent to mounting the front plate to the back plate using solder balls.

37. However, Nilsson shows in figure 4, this configuration creates a hermetic seal which is electroconductive, which allows for easy electrification of the device.

38. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to seal the front plate of Asai and Sakaguchi to the back plate using solder balls.

Response to Arguments

39. Applicant's arguments with respect to claim have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

40. Applicant's amendment filed 01/18/2005 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

41. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:30 - 5:00, M-F.

43. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

plm

JOSEPH WILLIAMS
PRIMARY EXAMINER